



UNITED STATES PATENT AND TRADEMARK OFFICE

can

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,626	03/15/2004	Shunpei Yamazaki	0756-7263	8416
31780	7590	01/04/2007		
ERIC ROBINSON PMB 955 21010 SOUTHBANK ST. POTOMAC FALLS, VA 20165			EXAMINER SCHILLINGER, LAURA M	
			ART UNIT	PAPER NUMBER
			2813	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/799,626

Applicant(s)

YAMAZAKI ET AL.

Examiner

Laura M. Schillinger

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 1-10, 12-14 and 19-55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 11, 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka (US 2004/0119955)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Tanaka teaches the following claimed limitations as cited below:

11. (Original) A method for manufacturing a semiconductor device comprising the step of: crystallizing a semiconductor film formed over an insulating surface by irradiating first laser light generated in a pulse oscillation having a wavelength at which an absorption coefficient to the semiconductor film is $1 \times 10^4 \text{ cm}^{-1}$ or more and a second laser light generated in a continuous wave oscillation [0014; 0015];

Art Unit: 2813

wherein when the first laser light and the second laser light are irradiated, a region irradiated by the first laser light and a region irradiated by the second laser light are overlapped in such a way that the region irradiated by the first laser light falls within the region irradiated by the second laser light [0014; 0015],

and wherein the second laser light is a solid state laser and has a fundamental wave [0009].

15. (Previously Presented) A method for manufacturing a semiconductor device according to claim 11, wherein the first laser light has a second harmonic [0020].

16. (Previously Presented) A method for manufacturing a semiconductor device according to claim 11, wherein the second laser light has a fundamental wave [0018].

17. (Currently Amended) A method for manufacturing a semiconductor device according to claim 11, further comprising the step of performing a heating process to the semiconductor film [0017].

18. (Original) A method for manufacturing a semiconductor device according to claim 17, wherein the heating process is performed using a gas RTA [0017].

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2813

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 15-18 are further rejected under 35 U.S.C. 102(b) as being anticipated by Taketomi et al ('397).

Taketomi teaches the following claimed limitations as cited below:

11. (Original) A method for manufacturing a semiconductor device comprising the step of: crystallizing a semiconductor film formed over an insulating surface by irradiating first laser light generated in a pulse oscillation having a wavelength at which an absorption coefficient to the semiconductor film is $1 \times 10^4 \text{ cm}^{-1}$ (Col.2 ,lines: 40-50) or more and a second laser light generated in a continuous wave oscillation [Col.21, lines: 40-50];

wherein when the first laser light and the second laser light are irradiated, a region irradiated by the first laser light and a region irradiated by the second laser light are overlapped in such a way that the region irradiated by the first laser light falls within the region irradiated by the second laser light [Col.21, lines: 35-55].

15. (Previously Presented) A method for manufacturing a semiconductor device according to claim 11, wherein the first laser light has a second harmonic [inherent- light will reflect causing a harmonic].

16. (Previously Presented) A method for manufacturing a semiconductor device according to claim 11, wherein the second laser light has a fundamental wave [Col.21, lines: 35-55- the continuous wave laser will have a fundamental wave].

17. (Currently Amended) A method for manufacturing a semiconductor device according to claim 11, further comprising the step of performing a heating process to the semiconductor film [Col.22, lines: 10-20].

18. (Original) A method for manufacturing a semiconductor device according to claim 17, wherein the heating process is performed using a gas RTA [Col.22, lines: 10-20].

Response to Arguments

Applicant's arguments filed 10/4/06 have been fully considered but they are not persuasive. Applicant argues that the laser beams are labeled first and second in contrast to the Applicant's teachings which designate that the second is the first and the first is the second. However, such an argument is not persuasive because a mere change of label from "second" to "first" would still render Applicant's claim anticipated and such designations can be made. Moreover, Tanaka teaches the fundamental wave as cited above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

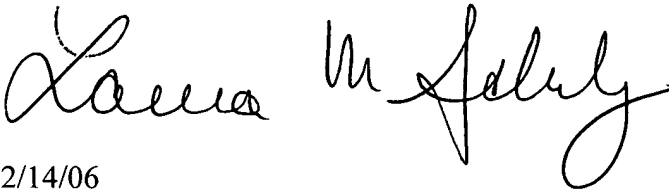
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2813

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in cursive script, appearing to read 'Laura M Schillinger', written in black ink.

Laura M Schillinger
Primary Examiner
Art Unit 2813

12/14/06